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ABSTRACT

The new demands being placed on the rural land base--for agricultural production, for energy and minerals, as well as for economic development--are considerable, and rural areas today face the difficult challenge of finding ways to accommodate new growth and development, while at the same time ensuring that essential activities and the inherent values of the landscape are not greatly impaired. A number of issues related to rural land resources are likely to be of key importance to rural America during the coming decade. Included among these issues are farmland protection, soil stewardship, mining and energy development, water resources, and habitat and scenic values. Analysis of recent trends and specific problems in each of these areas indicates that much needs to be done to make federal programs more responsive to the new realities of rural land use. Federal help in protecting rural America is essential to the national interest in ensuring the continued productivity of the country's working landscape. (Related reports on rural development in America are available separately through ERIC--see note.) (MN)

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RURAL LAND USE:
A NEED FOR NEW PRIORITIES

Prepared for the National
Institute for Work and Learning

by

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The Changing Context of Rural Land Use

Of the 2.3 billion acres in the United States, about one third is owned by the Federal Government. Another 300 million acres are in metropolitan counties--Standard Metropolitan Statistical Areas as defined by the Census Bureau.(1.) Most of the remaining land (1.3 billion acres--60 percent of the total) is privately owned--and for want of a better term, is usually called rural.

Perhaps it would be more appropriate to think of this land as America's "working landscape". It produces most of the nation's food and forest products. It plays a key role in providing minerals and energy products. Its aquifers and reservoirs are essential to water supplies, both urban and rural. And it is the place where, after decades of decline, more and more people are electing to work and live--not on farms, but in subdivisions, factories, stores, hospitals, schools and libraries not much different (save perhaps in size) than those in the suburbs of large cities.

Although constituting most of the nation's land, this privately owned landscape only occasionally becomes the focus of much public concern. Probably the last time that this was the case was during the the dust and depression-ridden 1930s. The sense of national emergency that followed the Dust Bowl and the collapse of the rural economy, stimulated new programs to conserve the soil of America's farmland, and new agencies were created to bring new development and economic vitality to rural communities.

Yet, after an initial flurry of activity, the working landscape began to recede as as a topic of public concern--perhaps for good reason. By the mid 1960s, U.S. agriculture was producing unheard of surpluses on considerably less land than at the end of World War II. The soil and water conservation programs that had been put in place three decades before seemed in the opinion of most observors, to have ameliorated the conditions that created the dust bowl. And, almost everywhere in rural America, people were leaving farms and small towns for the city. With the exception of areas within commuting distance of urban centers, some of which found themselves growing explosively, most small towns were confronted with the problem of attracting new development.

Yet there are some compelling reasons to believe that the land base will once again become the subject of widespread concern in the 1980s. For fundamental changes are occuring in rural America which could have significant implications for the "working landscape."

To begin with, the U.S. needs the products of this area in quantities and ways that are wholly unprecedented. Once agriculture could use up land and move on; today, according to the U.S. Department of Agriculture, there are only 130 million acres of land not currently in use that could be easily be brought into production. At the same time, the need for increased productivity--for food to sell abroad to off-set oil import costs, and, more recently, to produce biomass feedstock for conversion into fuels and energy--is going to add pressures on the land base. Other products--lumber, fossil fuel resources, and minerals--compete for much of the same land. Strippable coal underlies some of the most fertile corn-producing acreage in the

country. Elsewhere, energy development competes not only for the acres, but indirectly by requiring the same water needed for irrigation agriculture and the burgeoning urban populations of the sun belt.

And most rural areas are now growing. During the 1970s, for the first time in memory, more people moved into non-metropolitan counties than left them. In fact, the influx was great enough to boost the rate of population growth in these counties above that of metropolitan counties for the first time: 11.4 percent over the decade, as opposed to 6.1 percent (in metropolitan areas). (2.) Moreover, the rate of new job formation in non-metropolitan areas was twice the rate of metropolitan area job formation. And this growth has not been simply an extension of the urban fringe into the more distant countryside, as some initially suspected. Of the 1450 non-metropolitan counties that grew at a faster rate than metropolitan counties between 1970 and 1975, 850 were not adjacent to metropolitan areas. (3.)

The ways in which small towns and rural communities respond to the new growth and development is clearly a major environmental and land use concern. In absolute numbers, to be sure, metropolitan areas still gained the greatest number of people during the 1970s--8.3 million as compared to 7.1 million in non-metropolitan counties--and the rural growth was spread out over a far larger land area than is the case with metropolitan areas, which constitute just 14 percent of the country's land area.

But, many non-metropolitan areas are already contending with land use conflicts and development pressures similar in nature, if not in intensity, to those previously found primarily on the fringes of large cities. One recent study estimated that 350 rural counties were growing

at rates beyond the capabilities of local governments to contend with in terms of land use planning, provision of services and facilities, and the like. (4)

If rural communities find effective means to guide new development, the impact on the environment may not be that great. But if a laissez-faire attitude towards new growth predominates (as was the case in many suburbs during the 1950s and 1960s), a rural variant of urban sprawl may spread itself -- albeit thinly -- across a far wider landscape than is now the case. Relative to more compact settlements, this could result not only in growth problems typically associated with urban sprawl (such as relatively greater air and water pollution, higher energy expenditures associated with transportation, greater public and private expenditures for infrastructure and services) but also in a more pronounced effect on the rural landscape and traditional rural activities, such as agriculture, and forestry. Unlike the suburb, where agriculture and other traditional activities are largely transitional, the essential economic functions of the nation's working land base must be maintained.

Taken together, the new demands being placed on the rural land base-- --for agricultural production, for energy and minerals, as well as for economic development--are considerable, and rural areas today face a difficult challenge: to find ways to accomodate new growth and development while at the same time assuring that essential activities and the inherent values of the landscape are not greatly impaired.

A number of issues related to rural land resources are likely to be of key importance to rural America during the coming decade: these relate to agricultural land retention, soil stewardship, mineral and energy development, water rsources, and habitat and scenic values. These are not the only land resource issues confronting rural America, but they are quite clearly issues that are of great importance in many rural areas which, one way or another, will need to be addressed in the years to come.

Farmland Protection

"Farming no longer dominates rural life," concluded a recent study by the U.S. Department of Agriculture on the "structure" of U.S. agriculture.(5.) And that conclusion is backed up by some impressive statistics. Just 30 years ago, agriculture was the major source of income in two thirds of the country's 3000 counties. By the mid-1970s, agriculture provided 20 percent of personal income in less than 700 counties--most of them clustered in the mid-West and the Northern Great Plains. In non-metropolitan America as a whole, manufacturing, wholesale and retail trade, and professional services each accounted for more than twice as many workers as agriculture.

This transformation in the economy of most rural areas has been accompanied by a major increase in the conversion of farmland to non-agricultural uses--a circumstance that is prompting concern in most regions of the country. This is reflected by the fact that protection of agricultural land was seen as a high priority issue in each of the rural regional workshops held by the Institute for Work and Learning in 1980. According to the recently completed U.S. National Agricultural Lands Study (NALS), about three million acres of agricultural land are lost to development each year.(6.)

Less tangible than actual acreage diverted to non-agricultural uses, but probably of equal importance; are the "spillover" effects of urban land uses on local farm economies. In many areas, local farming begins to falter long before new subdivisions appear. As speculative buying of land begins, many farmers sell out or stop making long term investments in their farms. Support services may go out of business or move elsewhere. When the new subdivisions do appear, farmers may find that their new neighbors regard essential farm operations as a nuisance, and local restrictions may be imposed on ordinary farm activities.

Conflicts between industrial uses and agriculture may also arise. One particularly significant issue--brought up strongly at the Institute for Work and Learning's Michigan and Maine regional workshops--concerns the dumping of hazardous wastes on rural land. Without special precautions, hazardous waste disposal can result in contamination of land and livestock.

Farmland conversion was once considered to be just an open space problem on the fringes of large cities. But it is now seen as a far more pervasive problem which may, over the long run, reduce the capacity of the nation to meet long range demands for U.S. food. In the last decade, U.S. food exports have tripled, and have become a major factor in offsetting balance of trade deficits. To meet this increased demand, farmers have brought a great deal more land into production. Relatively little land (about 130 million acres) remains in reserve. Some projections suggest that, if current trends continue, the U.S. could cease to be a food exporting nation in fifty years.

The effects of rural population growth are another factor. Once largely limited to the fringe of major cities, farmland conversion is now occuring in a scattered pattern in many areas of rural America. In

some areas, it is occuring with a rapidity characteristic of the suburban growth. In others, a scattered overlay of development is evident.

Concern about farmland conversion is prompting numerous state and local programs to protect farmland from haphazard development. Beyond property tax relief programs, which are generally considered to be inadequate to abate land conversion pressures in and of themselves, two states--Oregon and Wisconsin--have adopted state wide farmland protection programs that provide guidelines for local zoning. About 104 counties and 166 municipalities have adopted agricultural zoning, according to the National Agricultural Lands Study.(7.) In addition, several areas (mostly in the Northeast) have programs to buy up development rights to farmland. Under this approach, landowners keep title to the land, and can continue to use it for agriculture, but, after compensation, relinquish their options to develop the land.

How are these programs working? NALS, which has conducted the most comprehensive survey of the programs to date, concluded it was too early to judge zoning: a well designed program could be effective if "agricultural zones were carefully laid out on the basis of accurate and complete data on soil productivity, land tenure patterns, and agricultural productivity," but that "zoning is vulnerable to change if there is a shift in political power."(8.)State oversight of local zoning

can provide greater permanance, but there are relatively few states where this is a politically realistic option.

As for purchase of development rights, NALS concluded that such programs are generally prohibitive because of their high costs. In areas where development pressures are intense, it can cost several thousand dollars an acre to purchase farmland development rights. Moreover, since it is generally only possible to buy development rights to a small amount of land, development may occur around farm parcels and make them difficult to farm.

While it is clear that zoning (mutable but cheap) and purchase of development rights (permanent but expensive) can be effective under the right circumstances, not every community will find these techniques appropriate.

For example, it is often not enough to just protect farmland from development: emphasis on protecting the activity of farming may be required. Agricultural districting--based on the premise that urban and other uses should not intefere with agriculture--has been used in New York State for some time, and is now being adopted by other states.

Moreover, except in a few cases, farmland protection programs often have not addressed the other side of the equation: the crucial problem of directing new growth to its most appropriate location. Oregon's statewise land use program is an exception: it is designed not only to protect farmland, but also identifies urban growth boundaries where new development will be encouraged.

Another important farmland protection issue concerns the role of the federal government. Federal and federally assisted programs and projects have, in many cases, inadvertantly encouraged conversion of prime agricultural land even when less valuable land has been available. Two federal agencies (the Department of Agriculture and the Environmental Protection Agency) have recently adopted internal agency policies designed to miminize the impacts of their own actions on farmland. The NALS strongly recommended that other agencies follow suit.

Beyond the effects of federal activities themselves, there is the question of whether the federal government should provide financial and technical assistance to states and localities interested in establishing their own farmland retention programs. Very modest legislation of this sort--designed to assist local demonstrations of innovative farmland protection approaches-- was proposed in the 95th and 96th Congresses, but has yet to be enacted.(9) Quite clearly, many localities could use such help.

Soil Stewardship

In the 1930s, a combination of drought, depression and soil-destroying agricultural practices brought the problem of soil erosion to national attention. President Franklin D. Roosevelt put the matter in stark terms: "The nation that destroys its soil, destroys itself." A sense of emergency about soil degradation led to the establishment of the Soil Conservation Service (SCS), and a nationwide program to conserve soil resources that has been in place ever since.

Despite the expenditure of $15 billion at the federal level in the interim, soil erosion has continued to be a major agricultural problem. But, as memories of the dust bowl began to recede, it has become in many ways a hidden problem.

After World War II, and up until the early 1970s, routine crop surpluses--made possible by technological advances and good weather--masked the continuing effects of erosion. Moreover, the early efforts by the Soil Conservation Service, and the local soil and water conservation districts that were set up to help farmers install conservation practices were very successful.

But the problem has not gone away; in fact, according to the 1977 National Resource Inventories (10), conducted by SCS, water erodes four billion tons of soil from the country's land base each year. Wind erosion takes additional soil. Although it is difficult to quantify lost production from erosion, USDA estimates that potential corn and soybean yields on some Mid-western soils could be reduced by fifteen to thirty percent by the year 2030. According to a recent report by the National Association of Conservation Districts, present erosion rates may be having the effect of removing from production the equivalent of one million acres of cropland per year.(11.)

Moreover, runoff from agricultural land is causing significant water pollution problems: the sediment carries organic matter, pesticides, and other agricultural chemicals into water bodies.

Dealing with the twin problems of soil erosion and water pollution from agricultural practices will be difficult. In response to increasing demand for agricultural products, many farmers have removed conservation shelter belts and other conservation practices begun decades ago. Moreover, the ever increasing size of farm equipment has made it difficult for farm operators to works on terraces, contour rows, and the corners of fields; as a result many traditional soil conservation practices are being abandoned.

The sudden interest in "gasohol"--ethyl alcohol mixed with gasolene--is another potential problem. Some gasohol proposals would involve processing stubble and other crop residues which would normally be left in the field. Unless carefully monitored and controlled, this could result in greatly increased erosion problems in some areas.

The fact that soil erosion continues to be a major problem in this country is causing reassessment of agricultural conservation programs that have been in effect for decades. Under the 1977 Soil and Water Resources Conservation Act, the U.S. Department of Agriculture is providing a great deal of new information about soil and water resources. The recently completed "agriculture structure study" came up with a number of policy recommendations that seem quite reasonable in the light of current and past trends: (1.) the need to target federal cost-share funds to areas and farms where erosion is the most severe; (2.) the need to divert agricultural land that is experiencing critically high rates of erosion from production for sufficently long periods of time to restore the land; (3.) use of conservation achievement incentives.

Energy and Mining*

Rural areas are no strangers to mining and energy development projects, but the redoubled efforts to increase domestic energy production, and assure national supplies of strategic minerals are adding a dimension of conflict in rural life that is unprecedented:

--In Minnesota, farmer opposition to construction of a transmission line that crossed their farms was so vehement that guards had to be posted along the entire route.

--South Dakota's Attorney General predicted that federal marshalls would be needed to protect a proposed coal slurry pipeline from farmers outraged by the project. The pipeline was never built.

--The small Colorado village of Crested Butte has mounted a multi-year campaign against a mining company's proposal to dismantle part of a nearby mountain that serves as a backdrop to the town. So far, they have succeeded.

The problem posed by these examples is a vexing one. There is a perceived national need for increased energy and mineral development, but the impacts of that development are not evenly distributed: they hit rural America the hardest. During the 1970s, many small towns in the west became "boomtowns" almost overnight, as hundreds and sometimes thousands of workers were drawn to a project. Many of these towns, lacking the planning skills to contend with even moderate new growth, suddenly had to grapple with problems such as acute housing shortages, traffic jams, inadequate public services, skyrocketing inflation and crime rates, and too few doctors

*The intense competition for water in the west among agriculture, energy, and urbanization is considered in a subsequent section.

In addition to the boom, there is the problem of the bust that may follow. Construction of a new power plant may bring 2,000 people into a town to work on a project directly, along with several hundred others to provide support services. But, once constructed, only a few hundred employees may be needed to actually run the operation.

Fortunately, western states are becoming more adept at dealing with the impacts of energy developments--through a variety of state programs aimed at energy impact assistance. But there can be no doubt that major projects radically change the character of western communities affected by them.

Although receiving less attention, the social and economic impacts of coal mining in Appalachia are also important. The Appalachian Regional Commission estimates that there could be an in-migration of 344,000 people into the region as a result of coal related development in the next decade if there is a major expansion in eastern coal production. The study estimates that it would cost $2.98 billion to provide housing, schools, roads, utilities and land for these people.

The problem is compounded by an acute housing shortage in the region--brought on by the destruction of much existing housing by floods in 1977, as well as by the requirements of in-migration. The housing shortage has been exacerbated by the limited amount of land that is available for community expansion. Much of the bottom land in the region is subject to recurrent flooding, and is illsuited for habitation. Much of the remaining land is owned by corporations that have been reluctant to make their land available for housing since this could foreclose their option to develop coal resources the land contains.

The Three Mile Island nuclear power plant incident vividly brought to public attention some of the planning issues associated with nuclear power plant siting. But the hazards associated with energy development are not limited to nuclear plants.

Underground coal mining has long been recognized as a dangerous activity for the miners themselves. Less well known are hazards--such as flooding and land subsidence--which may harm life and property in nearby settlements. Probably the most famous example of a mine related hazard to nearby communities was the Buffalo Creek, West Virginia, dam disaster in 1972. The dam, a temporary impoundment madeup of wastes from coal mining, burst under the pressure of heavy rainfall, and sent a torrent of water into Buffalo Creek. The flood killed over 100 people and left over 4,000 homeless. Land subsidence associated with underground mining is also a significant problem. About two million acres--one fourth of all land over deep coal mines--is unstable; subsidence can damage houses and other development over the mines.

Although sometimes characterized as "Acts of God," most mine related accidents affecting nearby development could be prevented through careful planning, i.e. through limitations placed on mining activities that constitute a significant risk to nearby development, or, conversely, through limitations on new development that could be placed at risk because of nearby mining activities. Provisions in the 1977 Federal Surface Mining Control and Regulation Act (P.L. 95-87) attempted to deal with these problems by requiring state regulatory authorities to have the capacity to designate areas unusitable for surface mining when mining operations would substantially endanger life and property, and to

suspend underground coal mining under urbanized areas, or other places where mining would create a substantial risk. It also calls for coordination of such determintaions with federal, state or local land use plans and regulations.

The surface mining act also addressed another mining issue of increasing concern: surface mining on prime agricultural land. Prime farmland overlies an estimated one fourth of the country's strippable coal reserves, and a significant potential for conflict exists in states like Illinois which are both major producers of coal and agricultural products. The surface mining act established stringent reclamation requirements for such lands. But the act has been under fire ever since its passage, and efforts to weaken the legislation have been proposed.

Energy development is one area where exceptionally strong federal involvement in land use has been proposed--not to force planning on local communities, but to, in fact, override local, state or even federal environmental objectives when those objectives would slow down or prevent the siting of needed facilities. A siting measure which would have allowed federal energy agencies to promulgate siting procedures for states that did not have a federally approved siting program was proposed by the Ford Administration in 1974, but was never enacted. A similar, but more direct, federal role, embodied in the Carter Administration's Energy Mobilization Board concept was similarly not enacted in the 96th Congress, but most expect some variant of this concept to be revived.

Given the magnitude of the possible impacts of hastily sited energy facilities, however, such an approach, if it suceeds, might very likely create more problems than it would solve. Many, if not most, states already have their own energy facility siting programs; because state agencies are less remote from the impacts of energy development, and more familiar with local conditions, they are much more likely to make appropriate siting decisions than a federal agency.

Water Resources

Water--both its quantity and quality--is another area where the realities of changing land use could have profound repurcussions for rural America. To begin with, irrigation agriculture--which produces some 28 percent of all crops on just 12 percent of the cropland base--uses more water than any other sector of the economy. In the years ahead, irrigation agriculture faces some serious problems.

In several areas of the west, most notably west Texas, irrigation agriculture is taking much more water from aquifers than is naturally being replenished. In Gaines County, Texas, the water level in the Ogallala aquifer has dropped 12.8 feet in the last ten years. This, coupled with increasing costs of pumping water, has resulted in the abadndonment of 100,000 acres of cropland within the county in the last few years.(12) Another serious problem is build up of salts on irrigated land from repeated irrigation.

In addition to problems arising from irrigation itself, Western agriculture is also facing stiff competition from urbanization and energy development for the region's limited water supplies. The City of Tuscon, for example, is trying to augment its water supplies by purchasing irrigated acreage, thus gaining hold of water rights. So far, according to the U.S. Council on Environmental Quality, the city has purchased about 12,000 acres of farmland, and anticipates that it will need to purchase an additional 36,000 acres by 1985. (13) This will essentially eliminate irrigation agriculture around the city.

Some areas, however, seem to be making real progress towards stretching their water supplies as far as they can--and in the process make some accomodation with agriculture. An example is Northglenn Colorado, a suburb of Denver. Rather than condemning irrigation water for municipal use as some other Colorado communities have done, Northglenn has entered into an agreement with local irrigators to recycle their water, and return it to them. The approach is intended to achieve several goals--allocating water as a means of keeping new growth within sustainable levels, protecting nearby agriculture, and reducing water pollution from sewage treatment.

The added overlay of demand posed by new energy development was a key issue which was raised strongly by participants at the Institute of Work and Learning's western rural workshop. The U.S. Department of Energy has identified five western regions which may encounter water shortages in the future due to the added competition for water from energy and industrial development. The DOE report notes that "obtaining water supplies for new energy facilities in (these) water short regions could involve availability and institutional conflicts with other users. If such conflicts cannot be resolved satisfactorily, projections for development of certain energy technologies and fuel resources may need to be revised."(14)

The problems with the water regime in the west are significant enough to be causing a major environmental problem--desertification. An estimated 225 million acres in the West are thought to be undergoing severe desertification, which is characterized by lower water tables, reduction of surface waters, salinization of water supplies, and severe

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erosion. While there have been many grandiose plans to increase western water supplies through massive diversions of far away rivers, desalinzation plants, or even transport of icebergs, these are not likely to occur within the forseable future, if at all. Thus, there is real uncertainty whether the west can sustain current levels of population growth, accomodate massive new energy development, and still maintain its irrigated acreage in production.

The question about what might be done to conserve water and to plan for its allocation among various existing and prospective uses is exceeedingly complex; effective action will need to involve all levels of government, and a multiplicity of private users. The federal government, which recently established water conservation as a major national priority, in many cases may actually be discouraging water conservation by providing water at subsidized prices. Many local governments in water short areas are still actively encouraging an influx of new population that may further exacerbate competition for local water supplies. And agricultural users are, in many areas, "mining" water from slow to recharge aquifers--a circumstance that makes sense only in the short run. This has led to proposals for linking Federal or state water policies with agricultural policy in order to discourage overuse of water.

even from a profit maximization point of view

Protecting Habitat and Scenic Values

The vastness, the diversity, and the sheer beauty of the American land is a transcendent perception that each generation of Americans discovers anew. And it is not just the beauty of the National Parks, though they are incomparable, that is discovered but that of scores of working landscapes all over the country that are outstanding for their aesthetic values and their provision of wildlife habitat. With the scatteration of new development across the countryside, and more intensive use of land resources for energy and other uses, there is a danger that many of these landscapes will lose the attributes that make them so attractive.

Yet this very increase in development pressure over a large fraction of the privately owned land base has very largely foreclosed one of the major strategies used by land preservationists during the 1960s to set aside open space land around rapidly urbanizing cities. The strategy was to induce a government--sometimes local, sometimes state, and sometimes federal (but almost always with federal dollars involved)--to simply buy up land of exceptional open space value that was slated for development.

This approach quite clearly is of very limited utility these days--not only because both the Carter and Reagan Administration's want to balance the budget, but because, with the price of rural land rising at two or three times that of inflation, a federal government real estate dollar can accomplish very little these days. Moreover, even if vast sums were available, it would neither be practicable nor desirable to purchase enough rural land to protect a landscape aesthetic which depends on rural scenery measured by the mile rather than the acre.

There are other options, however. In several areas that contain outstanding landscapes, governments are seeking to control the pattern of new settlement in scenic areas rather than buying up the land and eliminating new growth altogether. New York State's Adirondack "Park"--an area about the size of Vermont in which 60 percent of the land is privately owned--is a particularly conspicuous example of this. A State chartered agency encourages development in hamlet areas or in clusters, rather than in a scattered pattern. Encountering great local opposition when it was established in the early 1970s, the Adirondack plan is gradually gaining acceptance--a fact that in part reflects greater participation by local governments in the program. As local governments assume more responsibility, the Park agency is turning more and more of its attention to helping strengthen the local economy, which is dependent on tourism and forestry.

A similar effort--though involving the oversight of the Federal government--is being tried in the Pine Barrens of New Jersey. Similar approaches for the Big Sur of California, the Coulmbia River Gorge, and in several other areas--have been proposed. These approaches borrow from landscape protection techniques widely used in England and Europe, and have been called the "greenline concept." By using land acquisition sparingly if at all, and by applying a number of direct and indirect approaches to controlling development, a fair balance between economic development and landscape protection can often be achieved: traditional agriculture and forestry can continue (something that is often not the case with new parks), and some new residential, commercial and even industrial development can be undertaken--but only with careful guidance.

Institutional Responses

The change in rural land use trends has been so recent that almost everybody--including state, local and federal agencies involved in planning and land management--have been caught off guard. Yet, quite clearly, a different kind of institutional response is needed today than ten years ago--when the primary growth problem in rural America was thought to be no growth at all, and the primary farmland problem was thought to be overproduction.

For many rural localities--the place where new land use conflicts will sort themselves out, a continuation of past laissez faire responses to new development may result in serious growth problems. Traditionally, rural areas have not been well equipped--either by temperment or experience--to deal with the new land use issues that are now confronting them. Many rural governments have become aware that, without careful guidance, new growth and development could impair the landscape and affect other land uses, but they are not quite certain what to do about it.

Land use planning and zoning, have been, in the main, urban and suburban phenomena. Many rural areas have limited or no planning capabilities--a circumstance that reflects both a lack of a need for such capabilities until recently, and a resistence on the part of rural landowners to such approaches. In large part, this resistence stems from fears of landowners that land use controls will reduce the potential development value of their land. Much of the dramatic increase in the price of farmland over the last decade is related to the value of the land for agriculture--not development--but most landowners

want to keep their options open for the future.

This is not necessarily an insurmountable problem. Landowners near the urbanizing fringe around large cities can feel fairly secure in the assumption that their land will some day fetch a pretty price from a developer. Most rural landowners are not in that situation, however; a few choice parcels may be bought by developers; other land may be bought for amenity purposes. But most farmers will not be seriously approached--save perhaps by other farmers--about selling their land. Thus, they may stand to lose more than they will gain if nearby urban uses begin to interefere with the activity of farming.

Thus, it is not surprising that, in many areas of the country, farmers have taken the lead in trying to get agricultural land protection programs in place. Several . . . farm related organizations--including the National Association of Conservation Districts, the National Grange, the National Farmers Union, and the National Asociation of State Departments of Agriculture--have full heartedly endorsed proposed national legislation to assist states and localities to protect farmland.

One can also expect new approaches to land use problems that are more sensitive to rural needs. Over the years, the planning profession as a whole has been dominated by and urban perspective that may not be especially appropriate in a rural context. Greater interest in rural planning approaches is now in evidence--a circumstance that is reflected in increased literature on rural planning issues.

At the national and state level, also, there is growing recognition of the land use problems that rural communities face--but there is also a quandary about what to do. Local land use planning and regulation are controversial enough in rural areas, but when a state or especially the federal government, becomes even indirectly involved, the political heat becomes very intense.

The five years of Congressional debate in the early 1970s over proposed--but never enacted--legislation which would have provided financial assistance for state level land use programs is a case in point. A bill providing similar assistance for coastal areas passed easily in 1972, but, when statewide assistance was proposed, the bill not only failed to pass, but was largely ignored by the people in the country at large even as it was attacked vigorously by single-issue activists. As a result, the Congress, and the federal government as a whole, have become gunshy of new programs that could be even remotely construed as increasing federal involvement in land use decisions.

There is a certain irony in this, for this reluctance to deal with land use issues is occuring exactly at the time when rural America is most in need of assistance in dealing with its land resource problems--such as those described in the previous pages. And--given current fiscal constraints and the suspicion of planning and regulatory at all levels of government--it is not likely that this will change in the near future.

There are, however, a number of issues-- all related to that much discussed topic of "putting the Federal house in order"--that could help

rural areas deal with land resource problems. These would not involve massive new commitments of federal funds, or create a new land use bureaucracy. In fact, they might very well save money and reduce bureaucracy.

Over the years, well over 100 federal programs have been adopted which have fairly significant affects on state, local and private land use decision-making. Examples are highway programs, sewarage assistance, airports, water resource projects, and a host of other federal and federally assisted activities that affect growth patterns.

In some cases, federal programs have inadvertently subsidized or encouraged activities that have resulted in land use problems. Federal and federally assisted projects often result in conversion of prime farmland --even when other perfectly acceptable sites may be nearby. Federally subsidized water often discourages water conservation, and encourages land degradation. And there are a great many other federal programs and policies--ranging from sections of the IRS code that fuel the fires of inflation in farmland values to interstate trucking regulations--that have unintended "spillover" effects on land use. It would be reckless and unwise to simply cut out these subsidies and policies wholesale, for many of them serve important public purposes. But their land use effects are poorly understood, and merit careful study and possible modifications of policies where appropriate.

Another area concerns federal rural development programs. Over the years, literally hundreds of federal programs have been adopted to channel development assistance to rural areas. Initially, the idea was

to focus on distressed rural communities, but, gradually, many of these programs have been broadened to include, in one way or another, most of rural America. More careful targeting of these development programs could help to assure that those communities most in need--the 250 rural counties, located primarily in Appalachia and the South, and a few areas of the West, where rural poverty is a pronounced problem--get the most of the available development assistance.

Many of the other rural counties are less in need of assistance in attracting new development--they have apparently been successful at this more than anyone would have suspected a few years ago--than in assistance for planning. And here, again, useful changes could be made in the kind of planning assistance now given to rural America.

Most federally supported planning--both urban and rural--is conducted to meet narrowly defined objectives--such as for waste disposal facilities, or roads. While such planning needs to be conducted, broader planning assistance that would consider multiple objectives is not widely available--especially in rural America. Comprehensive planning assistance offered by the Department of Housing and Urban Development has been broadened over the years, but still is primarily directed at urban areas. And a small planning assistance program under the aegis of the Farmers Home Administration--authorized at $5 million per year--has only been sporadically funded.

Quite clearly, this is not adequate to the task at hand. Over the years, there have been a number of proposals to consolidate and coordinate federal and federally assisted planning--not only for reasons of efficency (many planning efforts overlap the same area) so that some degree of consistency among program objectives can be achieved. This may

be desirable--but it will not help communities deal with newly perceived problems such as farmland conversion for which no authorizing legislation exists. Nor is planning without implementation (through zoning, or other regulatory techniques by states or localities) of much use whatsoever.

Although beyond the scope of this paper except for in a general way, there are also the issues associated with federal land ownership. The federal government owns about one third of the nation's land. Most of this land is in the western United States, where about half of all land is in one or another of the federal land management systems. Some of this federal land is in national parks or wildlife refuges, but most is "multiple use" land administered either by the Interior Department's Bureau of Land Management or the Agriculture Department's Forest Service. Federal decisions about how this land is used--how much wilderness to designate, how much energy development to permit, or how much timber harvesting and grazing to allow --have major ramifications for Western states.

Over the last ten or fifteen years, several laws have been enacted that are intended to identify federal land management objectives more clearly. The result has been an intensive planning effort--characterized by a high degree of public participation, and, not surprisingly, controversey about specific management objectives (such as how much land to designate as wilderness.)

With the west continuing to gain population, and with western energy development playing a key role in various scenarios for the nation's energy future, management decisions about federal lands will continue to be a dominant land issue in the coming decades. Although many westerners see federal policies towards federal lands as impeding the region's economic development (something that would be hard to justify with statistics), the national interest in these lands requires a more complex management strategy than would otherwise be the case.

The more sophisticated planning processes that are now being applied to both BLM and Forest Service lands may well provide a vehicle for sorting out national, regional and local interest in managing the federal lands.

While it is clear that much can be done make federal programs more responsive to the new realities of rural land use, it would be a mistake to conclude that federal housekeeping chores alone are all that is needed. The land resource problems that rural America faces are unprecedented, and most, if not all of them would be there with or without past federal programs. As for the future, rural America not only needs help in dealing with these problems, but the national interest in assuring the continued productivity of the country's working landscape may well require that this help be given.

1. Only a small fraction (7.2 percent) within SMSA's actually in urban or built up uses. The rest is in open space, farmland, forest, or other non-intensive uses. SMSA's are used by most researchers and many federal programs to make a distinction between metropolitan and non-metropolitan areas; metropolitan counties are considered urban; non-metropolitan counties, rural.

2. U.S. Council on Environmental Quality, Eleventh Annual Report, (Washington, D.C.: U.S. Government Printing Office, 1981), p. 340.

3. Glenn V. Fuguitt and Paul R. Voss, "Recent Non-metropolitan Population Trends," in Growth and Change in Rural America, (Washington, D.C.: Urban Land Institute, 1979), p.4, Table I.

4. Kenneth L. Deavers and David L. Brown, Social and Economic Trends in Rural America, (Washington, D.C.: The White House, 1979).

5. U.S. Department of Agriculture, A Time to Choose: Summary Report on the Structure of U.S. Agriculture, (Washington, D.C.: U.S. Government Printing Office, 1981), p. 31

6. U.S. National Agricultural Land Study, Final Report, (Washington, D.C.:NALS, 1981) p. 13.

7. Ibid., p.59.

8. Ibid., p. 53.

9. For a discussion of this legislation, see Charles E. Little, "The Demise of the Jefford's Bill", Journal of Soil and Water Conservation, March-April, 1980.

10. Cited in National Association of Conservation Districts, Soil Degradation: Effects on Agricultural Productivity, Interim Report # 4 prepared for the U.S. National Agricultural Lands Study, (Washington, D.C.: NALS, 1980), p. 20.

11. Ibid., p. 29.

12. U.S. Council on Environmental Quality, op cit., p. 360.

13. Ibid., p. 359.

14. U.S. Department of Energy, National Energy Plan-II: Environmental Appendix, 1979, p. I-36.

15. U.S. Council on Environmental Quality, op cit., p. 348.